

THE STRATEGIC UTILITY OF THE UNITED STATES ARMY LIGHT INFANTRY

**A MONOGRAPH
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Infantry**



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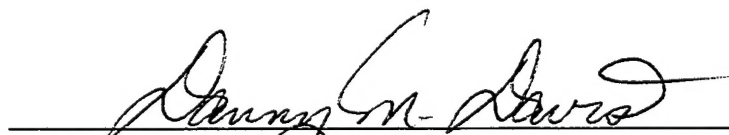
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ABSTRACT

THE STRATEGIC UTILITY OF THE UNITED STATES ARMY LIGHT INFANTRY
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As Chief of Staff of the Army in 1981, General Meyer believed that there was an important role for light infantry on the modern battlefield.

British combat operations in the Falkland Islands and the American experience during Operation Urgent Fury in Grenada highlighted the strategic utility and need of rapidly deployable light infantry. General Wickham (replacing General Meyer) believed that the solution to the Army's manning and strategic shortfalls was the immediate fielding of a 10,000-soldier light infantry division (LID). Secretary of the Army, John O. Marsh Jr., agreed. He believed the Army's inability to deploy rapidly hurt its appeals for force structure and modernization.

General Wickham approved an initial LID design on October 20, 1983. To meet his requirements, the planners specifically developed an organization designed for contingency missions not involving heavy combat. They viewed the division as a "first in" organization requiring augmentation for sustained operations. They provided only enough support systems for the division to operate in a low threat environment for 48 hours without external support. At less than 11,000 soldiers, the final design was a sparse, foot-mobile organization.

One receives a better understanding of the evolving role of the light infantry soldier through battlefield examples. Specifically, the conflicts in Korea, Vietnam, Panama, and the 1991 Persian Gulf War are used to demonstrate the light force operating autonomously. Conversely, at the Army's National Training Center many heavy commanders are realizing that light forces in support of their operations are a valuable asset. The lesson learned is that the heavy-mix concept has become an important part of today's warfighting. Additionally, moving from the mid to high intensity battlefield to Military Operations Other Than War (MOOTW), the light force has become a valued asset capable of performing a myriad of task.

Is there a future for light infantry and the light infantryman of tomorrow? Many possible organizational changes coupled with new technology weapons offer an opportunity for the light force to become more powerful, versatile, and flexible. As the 21st Century looms less than 2 years away, it is more important than ever to better define the role of the United States Army light infantry and determine its strategic utility to America in future warfare.

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I. INTRODUCTION

No government will be disposed to violate our rights if it knows that we have the means and are prepared and resolved to defend them.¹

—James Monroe

As Chief of Staff of the Army in 1981, General Meyer believed that there was an important role for light infantry on the modern battlefield. While stationed in Europe during the mid-1970s, General Meyer found that light infantry would be essential for combat in Germany's forested, mountain and urban areas. He also saw a need for light forces to deploy beyond central Europe for regional contingency missions. General Meyer convinced Secretary of Defense Harold Brown to forgo a plan to mechanize the 9th Infantry Division. Instead, General Meyer proposed that it could be redesigned and obtain many of the characteristics of a heavy division through innovative organization and new technology.²

On November 13, 1981, General Meyer approved the mission and operational concept for the test. The High Technology Light Division (HTLD) would consist of 16,000 soldiers transportable in 1,250 sorties of C-141 and civilian equivalent aircraft. General Meyer directed the High Technology Test Board (HTTB) to design a division to fight primarily in the Middle East

and secondarily as part of NATO. Reinforcing NATO was an addition to the original mission statement because the Army didn't believe it could justify developing an entirely new division that could not support its primary strategic mission.³

In June 1983, when General John A. Wickham became the new Army Chief of Staff, he faced an endless problem. While the 9th Infantry Division was developing innovative concepts and ideas, the Army was still no closer to a light infantry division design. In addition, full implementation of HTLD couldn't be realized until new weapons like the armored gun system were available in the 1990s. General Wickham decided to split-off the light division design into a new study. He directed efforts on developing a motorized division of about 13,000 men. The motorized division design developed included three ground maneuver brigades with a mix combined arms (heavy), combined arms (light) and light attack battalions. The division also included a cavalry brigade (air attack) with attack aviation, reconnaissance and combat support aviation. The certification test of the High Technology Motorized Division (HTMD), exercise LASERSTRIKE, took place in August 1984 at Yakima Firing Center. The exercise included over 20,000 soldiers and Marines as well as Air Force and Naval personnel.⁴

Despite increases in defense funding at the end of President Carter and the beginning of President Reagan's terms, the Army was still hollow because it had more missions than forces. In the 1980s the Army was

straining to meet global commitments outlined by the national military strategy. Part of the problem was that the heavy division was unaffordable both in terms of manpower and resources. In addition, the strategic air and sea lift available to deploy the Army were woefully inadequate. British combat operations in the Falkland Islands and the American experience during Operation Urgent Fury in Grenada highlighted the utility and need of rapidly deployable light infantry. General Wickham believed that the solution to the Army's manning and strategic shortfalls was the immediate fielding of a 10,000-soldier light infantry division (LID), a 3,000 man reduction from the previously proposed motorized division design. Secretary of the Army, John O. Marsh Jr., agreed. He believed the Army's inability to deploy rapidly hurt its appeals for force structure and modernization.⁵

In August 1983, General Wickham directed TRADOC to conduct a feasibility study for Army redesign, and report back by October. This became the official beginning of the Army of Excellence (AOE) study. The TRADOC study was to focus on three areas. First, it focused on designing a LID. Second it would reduce the heavy force designs by cutting personnel and equipment, and finally, it would develop the corps and echelons above corps design for each theater. General Wickham directed that the LID design be completed as quickly as possible. He wanted a division with nine maneuver battalions. It must have strategic mobility, deployable in 400-500 aircraft sorties, capable of presenting a rapid United States presence. Additionally, it

must be self-supporting for 48 hours and affordable within the Army's resource restraints. The overriding consideration was the reduction of manpower.⁶

General Wickham approved an initial LID design on October 20, 1983 and a revised plan on November 10. To meet his requirements, the planners specifically developed an organization designed for contingency missions not involving heavy combat. They viewed the division as a "first in" organization requiring augmentation for sustained operations. They provided only enough support systems for the division to operate in a low threat environment for 48 hours without external support. This allowed designers to significantly reduce logistics, fire support, antitank and survivability assets. Wherever possible, they replaced organic capabilities with a few trained cadre organized to conduct indirect fire missions, operate antitank systems, and establish a logistics life line with augmentation from a higher headquarters. At less than 11,000 soldiers, the final design was a sparse, foot-mobile organization.⁷

The LID has been the most controversial design initiative since the Pentomic division. Senior commanders in Korea and Europe questioned their need for light divisions. Others argued the real problem was that the Army did not create an adequate support base at the corps level to support the austere light divisions. The final designs clearly reflected the strategic realities of the 1980s. The demands of national strategy, manpower and

budgetary constraints weighed heavily on the AOE study. The Army had to be able to support worldwide contingencies within the force structure available. In the end, General Wickham ensured that the Army maintained a viable force while expanding its operational capabilities.⁸

This new light infantry organization would be offensively oriented, highly responsive, and capable of performing a wide range of missions. Its expertise would be found in those areas of the world where terrain and environment preclude heavy forces. It is important to recognize the strategic value as well as the battlefield utility of the light infantry division concept. The concept has relevance because it involves development of not only highly deployable, hard hitting combat units with a higher ratio of combat to support capabilities but also lighter, technologically current equipment and resources. The smallest active United States Army in 34 years requires an army of excellence which optimizes combat power.⁹

The critical concept of the light division is its rapid deployability enabling soldiers to arrive at a crisis area before a conflict begins, or quickly thereafter to contain the situation. By demonstrating United States resolve and capability, the light division may well prevent the outbreak of war. This is particularly so where low to mid intensity conflict threatens, and United States presence can have a decisive affect on the outcome. Because of its strategic mobility, the light infantry division helps reassure our friends and allies, and deter our adversaries.¹⁰

As a credible deterrent against contemporary threats, light infantry units must be able to fight anytime, anywhere, against any opponent. In mid to high intensity scenarios such as those possible in Southwest Asia, light infantry forces must be augmented with additional units to strengthen their combat power and sustainability. In such situations light infantry forces can be assigned missions which will free up mechanized and armored elements for decisive employment elsewhere on the battlefield.

United States Army light infantry operations are characterized by flexibility both in tactical employment and organization for combat. Light infantry forces habitually operate as combined arms teams with organic engineers, artillery, aviation, and air defense. When suitably augmented and task organized for a specific mission, light infantry are capable of operating independently at brigade, battalion, and company levels. In addition, they can reinforce with, or can themselves reinforce, airborne, air assault, special operations, armored or mechanized forces.¹¹

One receives a better understanding of the evolving role of the light infantry soldier through battlefield examples. Specifically, the conflicts in Korea, Vietnam, Panama, and the 1991 Persian Gulf War are used to demonstrate the light force operating autonomously. Conversely, at the Army's National Training Center many heavy commanders are realizing that light forces in support of their operations are a valuable asset. The lesson learned is that the heavy-mix concept has become an important part of

today's warfighting. Additionally, moving from the mid to high intensity battlefield to Military Operations Other Than War (MOOTW), the light force has become a valued asset capable of performing a myriad of task.

Is there a future for light infantry and the light infantryman of tomorrow? Many possible organizational changes coupled with new technology weapons offer an opportunity for the light force to become more powerful, versatile, and flexible. As the 21st Century looms less than 2 years away, it is more important than ever to better define the role of the United States Army light force and determine its place in future warfare. John English comments in the Prologue of his book, *On Infantry*: "groups of foot soldiers remain to this day among the most powerful and influential forces on the battlefield."¹²

II. THE LIGHT FIGHTER

*"Whosoever desires constant success must change his conduct with the times."*¹³

—Niccolo Machiavelli: *Discorsi*, 1531

What precisely defines the term "light infantry"? How does light infantry differ from regular or conventional infantry? Are light infantry and "dismounted infantry" synonymous? Is light infantry merely conventional infantry given a light organization by stripping out heavy equipment and vehicles, or is it something quite different in terms of tactical style, attitudes, and utility? Are light infantry forces elite forces or not? These questions and others have occupied the attention of planners and trainers in the United States Army since 1983. It was then that the Chief of Staff of the Army decided to introduce light infantry divisions into the Army's force structure. It has taken time for these questions to be addressed, and perhaps they still remain a mystery.¹⁴

The United States proposes the idea that the primary determinant of the light infantry is its organization. Light infantry forces are light because they possess no organic heavy equipment such as armored personnel carriers, tanks, self-propelled artillery, vehicles for transport, and engineer assets.

They fight on foot, in close terrain, employing tactics that do not vary significantly from tactics employed by conventional infantry (i.e., motorized and mechanized) forced to dismount. The value of light infantry, following this line of thought, is in its strategic mobility. Light infantry can be moved rapidly to "hot spots" anywhere in the world. Its activities and capabilities, once deployed, are less important than its ability to deploy in response to a crisis.¹⁵

In contrast to this view, another interpretation exists. Mostly European in its context and origins, it distinguishes light infantry from conventional infantry primarily on the basis of attitude and tactical style. Light infantry, from this perspective, has been a continuous component of European military formations for almost 300 years. Originally appearing in the form of French *Chasseurs*, Prussian *Jaegers*, and Austrian *Grenz* regiments, these European light forces were used initially in skirmishing, hit-and-run raids, ambushes, ruses, and as guards for the main forces.¹⁶ In contrast to the strict, drill-style maneuvers of the heavy infantry, these light infantrymen were fleet, nimble, and resourceful capable of operating independently from the regular army. The development of light infantry in Europe was paralleled in the New World by the rise of similar light units, such as the 60th Regiment of Foot and the American Ranger companies, units

raised for scouting, skirmishing, and countering the activities of the French and Indian irregulars.¹⁷

The European concept of light infantry expanded during the wars of the Napoleonic era. From 1790 to 1815, light units proliferated, evolving to include light artillery and cavalry, and assuming a wider role on the battlefield. Covering withdrawals, screening advances, confusing the enemy and keeping him off-balance, light units made their presence felt at *Ulm*, *Jena*, *Auerstedt* and throughout Wellington's entire Peninsular campaign in Spain. Employment of light infantry by European powers has continued unabated into the present day.¹⁸

Light Fighter Characteristics

According to Major Scott R. McMichael, author of *A Historical Perspective on Light Infantry*, the four primary characteristics that distinguish light infantry forces from regular (dismounted, motorized, or mechanized) infantry are: (1) self-reliance, (2) mastery of the environment, (3) versatility, and (4) high esprit. The most important of these characteristics is an attitude of self reliance. Self reliance forms the essence of the light infantry ethic, the fountainhead from which all of its other characteristics flow. This attitude of self reliance is exhibited by light infantry forces in a number of ways. For example, light infantrymen typically demonstrate strong confidence that they will survive and succeed in

whatever situations they are found. They are undaunted by unfavorable conditions. Their resourcefulness permits them to devise schemes to accomplish their missions, no matter how difficult the tasks. Furthermore, light infantrymen are accustomed to austerity. They have learned to do without comforts and benefits that other soldiers consider to be necessities. They are not *psychologically* tied to a logistic lifeline. Their attitude of self reliance leads them to use any available resource to sustain themselves or to improve their combat capabilities. Moreover, light infantrymen do not give up. Even when outcomes seem inevitable, light infantrymen stay in the fight and attempt to turn situations to their advantage. Their self reliance is typified by self denial, fortitude, tenacity, and resourcefulness.¹⁹

This attitude of self reliance gives the light infantrymen a *psychological* advantage over his enemies. Confident in their abilities, light infantrymen normally consider themselves to be tactically superior to their opponents. Once they have demonstrated this tactical superiority, their enemies often become fearful and wary. Light infantrymen use this *psychological* advantage to keep their enemies off balance and tense. Unpredictable, invisible to view, employing methods not anticipated by their enemies, light forces can often paralyze the minds and wills of their enemies before battle begins.

This self-reliant attitude enables light infantry units to become the masters of their environment which is the second distinguishable characteristic. Light infantrymen do not fight, fear, or resist the environment; they embrace it as shelter, protection, provider, and home. They learn to be comfortable and secure in any terrain and climate, be it jungle, mountain, desert, swamp, or arctic tundra. Exceptionally adaptable, light infantry units dominate the terrain in which they operate and use it to their advantage against their enemies. As a result, light infantry forces exhibit a well-developed appreciation for the tactical aspects of ground. Because they understand and accept the terrain and climate as their natural environment, light infantry forces possess an unmatched tactical mobility on difficult ground. Moving with a speed and ease that astounds, light infantrymen routinely use routes and traverse areas deemed impassable by regular troops. Naturally, this terrain specialization takes time to develop.²⁰

Mastery of the environment and the attitude of self-reliance combine to give the light infantry its third characteristic, versatility. Light units adapt quickly from one environment to another or from one type of operation to another. Abrupt changes in plans find them still ready for action. Holding a jungle base one day, they may be ordered to conduct a deep raid, mount a long-term reconnaissance patrol, participate in a riverine operation, or attack a fortified position on the next. In addition, they can operate independently or in conjunction with larger forces. They can also function with minimum

combat support. Unexpected situations do not throw them off-balance. With additional specialized training, such as airborne training, light forces can become even more versatile in environment, mission, and circumstance along a spectrum of operations from peace to war. Their versatility is also reflected in a propensity for improvisation and innovation. Light infantrymen naturally derive new tactics, if necessary, because they are not tied dogmatically to a specific doctrine. They use their equipment in innovative fashion, and do not hesitate to use the enemy's weapon and resources when they can. They also remain open to new ideas, new technology, and new weaponry. Light infantry forces maintain a flexible attitude toward the battlefield.²¹

The fourth and final characteristic that light infantry forces typically possess is high esprit. Ask a light infantryman and he will tell you that he is different. He is proud of his ability to operate as a self-reliant entity in the most difficult circumstances. He knows that he is often assigned the most demanding missions because of his strategic mobility and versatility. Confident and secure in the awareness of his unique tactical skills, light infantrymen consider themselves to be a cut above the average soldier. However, the general characteristics of light infantry do not appear automatically. They are developed through training, leadership, and actual operations.²²

The Light Fighter Organization

Unlike highly specialized light infantry units such as the Rangers most light infantry forces are not composed of elite troops. Nonetheless, given excellent leadership and a demanding training program, light infantry units develop an elite character. As they are pushed to standards of performance that seem out of their initial reach, light infantry soldiers acquire the sense that they are something special.

Light infantry forces typically possess little heavy equipment and transport. However, they often acquire such support temporarily when needed. The bulk of light infantry firepower at the battalion level and lower is self-generated with light and medium machine guns, 81-mm mortars, rocket launchers, automatic rifles, hand and rifle grenades, and individual weapons. At a higher level, light infantrymen tend to focus on the effective use of their own organic infantry weapons (a manifestation of their self-reliance). If equipment cannot be man packed, the light infantry often has little use for it.²³

A number of themes are dominant in light infantry training. For one, light infantry forces train under austere conditions. Comfort and luxury are rare. Rather, misery and privation prevail. Light infantrymen are taught to be self-reliant by being denied the things that they think they need in training. Food, water, rest, shelter form the elements: all of these fundamental needs are cut to the bone during light infantry training. Light

infantry soldiers are pushed to the limits that they can endure—and then beyond. If they do not break, they learn that they can do things they never imagined they could and that they can continue to perform even though they are miserable and exhausted. Their mettle is indeed tested.²⁴

Light infantry training ultimately produces high self-confidence, trust, and cohesion within light infantry units. Combat seasoned soldiers often find that combat conditions were actually less severe than the conditions they experienced in training. In addition to austerity and rigor, light infantry training puts great emphasis on physical fitness.²⁵

The light infantry Mission Essential Task List (METL) often places physical demands on soldiers far in excess of those endured by regular infantry. Thus, physical fitness training is integrated continuously into light infantry training. Troops do not ride to the rifle range; they march or run with weapons. Long marches with full rucksacks are common. Twelve to eighteen hour days develop endurance. As competition grows, standards are raised. In the process, those less capable are purged.²⁶ The ultimate goal is to train while tapping deep reservoirs of strength and stamina in the men thus, building the foundation for the units Mission Essential Task.

Another theme of training is the development of initiative, particularly for NCOs and junior officers. Although common throughout the Army, initiative is important to the light force because of its inherent self-reliance and versatility. Initiative and flexibility are developed by introducing

unanticipated requirements into the training and requiring a response. A further technique is to place the burden of responsibility for some of the training on these junior leaders, requiring them, sometimes on short notice, to produce a plan and obtain the resources necessary for the training. Small-unit tactical exercises, such as patrolling and infiltration, also develop initiative. Like physical fitness, the development of initiative is integrated into the training program wherever possible. It is clear that these three training themes—austerity, physical endurance, and initiative—contribute to developing the four primary characteristics of self-reliance, mastery of the environment, versatility, and high esprit.²⁷

All light infantries seem to focus on several common skills in their training programs. Expert marksmanship, for example, is cited constantly as a fundamental skill. While all infantrymen—indeed all soldiers—must know how to shoot, light infantry units approach marksmanship as a professional art. Moreover, light infantrymen must have detailed knowledge of all unit infantry weapons, including crew-served machine guns. This allows for depth within the unit. If the machine gunner falls another can operate the weapon, thus maintaining the combat power. They spend hours on the range, day and night, refining their accuracy and rate of fire in all weather and simulated combat conditions. This training usually includes a heavy dose of maintenance training, actual practice on enemy weapons, and marksmanship competition internal to the unit. Familiarity with weapons

has no relevance or meaning to light infantrymen: the achievement of expert-level skills is their goal. Light infantrymen are weapons masters.²⁸

Light infantry training emphasizes a variety of other skills and abilities: pioneer skills (to reinforce and exploit the terrain); field craft, small unit tactics tailored to the operational environment; cross-training to spread expertise in a number of special skills, for example, artillery observation, communications, mortar fire, and stealth. In addition, light infantries normally receive some form of specialized training to permit them to operate in unusual environments. Thus, all British infantry battalions passed through the Jungle Warfare School before their actual employment in Malaya and Borneo. The Chindits trained intensively in river-crossing operations, and the First Special Service Force learned to ski because of the uniqueness of their intended employment. Light infantry forces also train extensively at night. In fact, light infantry views the nighttime as their period of battlespace maneuver.²⁹

Light infantry is a force of unique skills centered around operational and strategic mobility capabilities. General Wickam perhaps unknowingly at the time, developed a force that has evolved to meet the needs of a very challenging world. Its self reliance, mastery of the environment, versatility, and esprit provide it character, but its mobility and mission flexibility provide strategic utility for the National Command Authority's use under nearly any circumstance. Because of this uniqueness, it has a viable

place in the war-no-war fight along side its heavy brother. The United States Army light infantry organization continues to evolve across the spectrum of conflict. Indeed, the light force has become a stand alone force, but also plays a critical part within joint and combined arms teams working to meet the needs of a changing military requirement.

III. EMPLOYMENT OF THE LIGHT FIGHTER

*"In war the only sure defense is offense, and the efficiency of the offense depends on the warlike souls of those conducting it."*³⁰

— Patton: *War as I Knew It*, 1947

When a crisis occurs in the world, United States light infantry forces are often sent forth because of their strategic utility, mobility, and flexibility. With this unique ability, planners should attempt to maximize the capabilities of this force. In combat conditions, it is preferable for light forces to operate at night and in close terrain that restricts easy movement by heavy, mechanized forces. The light fighter is well suited for offensive operations. Indeed, based on the aforementioned characteristics of the light infantry, it is its nature to attain and retain the initiative in combat. Constantly probing, pushing, and challenging the enemy, light infantry forces cause the enemy to react to their activity, not vice versa. For example, during a Combat Training Center (CTC) rotation in Europe, a commander for the heavy Blue force used a single light infantry battalion to deceive an OPFOR division during the operation. The battalion caused the OPFOR mechanized division to move its main effort 12 miles from their intended axis of approach when it could not identify what kind of force it was facing. The

enemy division intelligence assets reported that they faced an airborne division or possibly a heavy brigade equipped with armored personnel carriers.³¹ As this example illustrates, light forces are capable of operating in a mid to high intensity threat as members of a combined arms team. Additionally, they are able to significantly influence areas of the world as a participants in Military Operation Other Than War (MOOTW). Light infantry forces are a viable force whose unique character and capability adapts and continues to evolve with needs of the 21st Century.

The Light Fighter Stands Alone

The United States national resolve was clearly demonstrated in the early stages of Operation Desert Shield as Colonel Ron Rokosz's 2nd Brigade of the 82nd Airborne Division, "the ready brigade," arrived at Dhahran airfield. As the first American ground troops reaching Saudi Arabia, they represented an arm of the President's National Security Strategy.³² They sent the message that blatant aggression would not be tolerated and the United States was going to play an active part in its conquest. Although lacking the capabilities to match the Iraqi's combat power, the 82nd Airborne Division augmented with other capabilities, provided both an operational and political obstacle, rapidly shoring up the United States obligation to Saudi Arabia. This is a testimony to General Wickam's foresight and the strategic deployment capability of the light force.

This current example of employment of a light unit into harms way follows on the heels of a proud tradition. Although not specifically thought of as light infantry in terms of organization and characteristics of today, many ground soldiers from wars past stood alone and made a name for those today to be proud. In Korea, April 17, 1953, for example, fifty-five American infantrymen maintained a foothold on Pork Chop Hill, pinned down by the Chinese. Due to the nature of the terrain it was extremely difficult for heavy forces to operate in the area thus, this becomes an example where the environment dictates the use of the foot soldier. On the night of April 17 two companies of the 17th Infantry struck the western end of the hill from both sides. The battle had continued all through the following day. By the night of April 18 the Chinese had conceded tactical defeat.³³ In the end, a pair of boots stood on the side of that hill claiming victory against communist aggression in the name of America. Proper application of the force is just as important as getting the force there. In this case the hills and vegetation favored the light force allowing them to use their mastery of the environment to defeat the enemy.

Vietnam was a war where the light fighter played a prominent role based on METT-T. The French were the first to discover that mobile or heavy forces were not suitable for counter insurgency operations. From November 1953 to September 1954, the French Mobile Group 100, a mechanized infantry force operating in the Pleiku area, despite a superiority

in firepower, lost hundreds of personnel and armored vehicles to guerrilla fighters without any appreciable tactical success. Additionally, as the French established defensive bases, they were probed, harassed, and once again, attacked. When the enemy achieved the desired effects, they would slip away to the jungle and disappear³⁴. Due to virtual annihilation, French Mobile Group 100 was dissolved on September 1, 1954.³⁵ In March of 1965 the first American combat troops began to arrive in Vietnam. The United States military strategist failed to recognize the lessons learned from the French. They eventually realized, however, that to fight in the jungles of Southeast Asia, the weapon of choice was going to have to be the foot soldier. Although heavy forces played a valuable role in Vietnam, it once again came down to "infantry boots on the ground." Perhaps the best way to identify the uniqueness of the light infantry soldier in Vietnam is with this excerpt from Stanley Karnow's book, *Vietnam*;

"You dug a hole right beside where you are going to sleep, and put up a one-man poncho tent. Unless something happened, you'd wake up in the morning with your mouth tasting rotten and your clothes still wet. You'd eat, and then you'd be off again, not thinking very much. In retrospect, it amazes me how ordinary that kind of life became. You're sitting there at six o'clock in the morning, a cigarette hanging out of your mouth, pulling on your boots, and you're in the middle of nowhere. Suddenly you realize, I'm not supposed to live this way, but then you're surprised that it seems so natural."³⁶

Section II of this monograph discussed that versatility is enhanced with specialized training such as airborne training. This was demonstrated

in December of 1989. While exercising operational and strategic mobility, 731 United States Army Rangers, jumped from 11 transport aircraft flying over a hostile airfield in Panama. For the Panamanian Defense Force on the ground, a relatively clear evening sky filled with black berets. The primary targets for the Rangers were *Tocumen* military airfield and *Omar Torrijos* International Airport.³⁷

Perhaps the most important reason to secure the two airfields was the need to have access for follow-on parachute and, especially, air landed operations. Howard Air Force Base on the west side of the canal was in the line of Panamanian Defense Force mortar fire, and snipers could easily position themselves along the outer fence of the installation. It was possible that Howard would become inoperable and aircraft carrying the 7th Infantry Division troops would not be able to land safely. *Tocumen* was the only alternative.³⁸ This particular example illustrates a light infantry package where the versatility of the Rangers secured airfields for additional light forces to enter the area of operations and conduct its mission.

The aforementioned examples illustrate characteristics that make light fighters viable today. The 82nd Airborne Division demonstrated its strategic mobility acting as the fist for the United State's National Security Strategy in the early stages of the 1991 Persian Gulf War. Similarly, combat units in Korea and Vietnam demonstrated their uniqueness, esprit, and

intestinal fortitude in full scale combat ranging from low to high intensity. Finally, the airborne assault led by the Rangers into Panama demonstrates the versatility and quick strike capability as part of an infantry package during time of crisis. Each of these situations are cases where the light infantry force was the predominant player. Not because it is a better force but because of the nature of the enemy, environment, and in certain instances, its strategic deployability. Not all situations are as accommodating. There are those environments where the light force will operate as a member of a combined arms team, offering a unique roll on today's mid to high intensity battlefield.

The Combined Arms Team

Heavy-light operations are effective when the strengths of one part of the force is used to complement the limitations of the other. Without complementary actions heavy-light operations fail. Successful heavy-light combined arms operations require training and practice to be effective. All parts of the force must learn and practice to exploit the capabilities of the other parts in order to minimize the limitations and produce force synergy.³⁹

The light infantry is particularly effective when used as part of the combined arms team. It is also effective in economy of force operations and operations with the intent of denying terrain to an opposing force. Light forces, with proper augmentation allow the maneuver commander more freedom to employ armored and mechanized forces elsewhere on the

battlefield. During one of the many heavy-light engagements at the Army's National Training Center, a light infantry task force (part of a heavy brigade) augmented with a tank team and heavy engineers was able to seize and clear a heavily fortified piece of restricted terrain. This initiative allowed the armor and mechanized forces of the brigade to pass through and seize the brigade objective.⁴⁰

In the defense, the light infantry force can be more flexibly positioned to block enemy avenues of approach while the heavy force pushes the enemy into the light forces engagement areas. Additionally, the light force can more quickly attack into the enemy flank, thus capitalizing on the light forces abilities of cover and concealment to engage and defeat an enemy attack at optimum ranges. An opposing force unable to predict or know friendly locations has difficulty in massing fire power and using mobility against them.⁴¹

A light infantry unit can be employed by the heavy forces' commander to conduct raids and ambushes, operations in restricted urban terrain, and rear battle operations. Heavy forces, however, are most effective when they can use what mobility, agility they have, and maximize firepower to seize terrain and neutralize the opposing force. Indeed, heavy forces are vulnerable against a force that they cannot see or have difficulty maneuvering against. Clearly, heavy and light forces together have the

capability to shape and restrict the battlefield in an attempt to expose the vulnerabilities of the enemy force.⁴²

Modern mechanized and armored forces rely on speed, mobility and firepower to defeat their opponent. The age old military axiom, "the first to fire is frequently the victor," is correct. Armored and mechanized forces seek to engage targets first at the maximum ranges their weapon systems will allow. Engagements are fast moving and cover large areas of the battlespace as opponents maneuver to offset the lethality of modern weapon systems.

Light infantry forces rely on concealment and sudden violent actions to surprise, shock, and destroy their foe. They attempt to deny the enemy freedom of maneuver or the opportunity to fight back. Without properly prepared positions and cover, light forces are more vulnerable to the effects of enemy indirect fires than heavy forces. To reduce unnecessary losses of light forces to indirect fires, counterfire operations are essential. An enemy force that can find an unprotected light infantry force with indirect fires can destroy it. Even in prepared positions, light infantry faces a significant risk.⁴³ Additionally, the light infantry would have great difficulty surviving a fight in the open against a mobile enemy that can see and engage them beyond the range of light force weapons.⁴⁴ It is therefore imperative that the commander think through the employment of light forces,

The one-two punch of heavy-light operations provide flexibility to the maneuver commander by taking advantage of the unique capabilities of both

parts of the force. Effective employment of heavy-light forces is difficult unless both parts of the force know and understand the capabilities and limitations of the other part. Vision and mission development is achieved through communication, training and practice.⁴⁵

Early in World War II, the introduction of the combined arms team is illustrated as the German Africa Corps, under the command of Lieutenant General Erwin Rommel, attacked the British Garrison at Tobruk, Libya to capture a much needed deep water port. In four days of battle, the Africa Corps suffered a humiliating defeat at the hands of a largely non-mechanized force. Rommel believed that the garrison force could not withstand the onslaught of his battle proven armored corps.⁴⁶ Facing one German and two Italian armored divisions, the garrison at Tobruk consisted of soldiers of the 9th Australian Infantry Division, the 18th Brigade, 7th Australian Infantry Division, British 3rd Armored Brigade, and a few thousand troops of other nationalities. The total fighting strength of the garrison at the beginning of the battle was about 19,000 soldiers. The combined German and Italian combat strength was slightly over 24,000. The Allied forces, organized as a combined arms team, was able to defeat the superior enemy force by using the capabilities of both light and heavy forces to exploit the limitations of the enemy armored force.⁴⁷ Rommel, after the defeat, reflected that;

"In a mobile action, what counts is materiel, as the essential complement to the soldier. The finest fighting man has no value in mobile warfare without tanks, guns, and vehicles. Thus a mobile force can be rendered unfit for action by destruction of its tanks, without having suffered any serious casualties in manpower. This is not the case with position warfare, where the infantryman with rifle and hand grenade has lost little of his value, provided, of course, he is protected by anti-tank guns or obstacles against the enemy's armor. For him number one is the attacking infantrymen. Hence position warfare is always a struggle for the destruction of men, in contrast to mobile warfare, where everything turns to the destruction of enemy materiel."⁴⁸

Stability Operations

As light infantry doctrine has matured over the past several years, the emphasis has been expanded beyond military operations in mid and high intensity conflicts to Military Operations Other Than War (MOOTW). One example of this would be the implementation of the Eisenhower Doctrine in 1958 to assist Lebanon in maintaining its independence.⁴⁹ Still another example was the deployment of Army paratroopers and Marines into the Dominican Republic in 1965 to prevent the establishment of another communist country in the western hemisphere.⁵⁰ Strategic utility, through mobility, versatility, and flexibility make light infantry a force of choice for fulfilling missions where independence is threatened and immediate suppression is required.

Having identified employment capabilities and the effectiveness of the combined arms team in the aforementioned section, what Military Operations Other Than War (MOOTW) face the light force? According to the

1993 version of Field Manual 100-5, *Operations*, there are several categories of MOOTW: (1) peace operations, (2) combating terrorism, (3) counterdrug operations, (4) noncombatant operations, (5) arms control, (6) nation assistance, (7) support to insurgencies, (8) support to counterinsurgencies, (9) show of force, and (10) civil disturbance.⁵¹ Light infantry plays a significant role in each of these categories in support of the President's National Security Strategy which promotes three principal objectives: (1) enhance security, (2) promote prosperity, and (3) promote democracy.⁵² The underlying ideal of this strategy is to work with Allies to build a peaceful and prosperous world. Thus, this section is going to focus specifically on Peace Operations and the light infantry's impact.

There are two branches to Peace Operations. The first is Peacekeeping and the second is Peace Enforcement. Peace Keeping involves United States military operations that are undertaken with the consent of all major belligerent parties. These operations are designed to monitor and facilitate implementation of an existing truce agreement and support diplomatic efforts to reach a long-term political settlement. The multinational force and observers operation in the Sinai provides a classic example of a force conducting a Peacekeeping operation.⁵³ This is also an example of a mission that is predominately executed by the light force. The 25th Infantry Division, 10th Mountain Division (Light), 82nd Airborne Division, 101st Airborne

Division (Air Assault), and Army National Guard each deploy to the Sinai on six month rotations. Their primary focus is one of observation within the region. This is often done by way of squad size outpost located throughout the area of responsibility. The light force in this case is best suited for this operation.

Peace Enforcement is the application of military force or the threat of its use, normally pursuant to international authorization, to compel compliance with generally accepted resolutions or sanctions. The purpose of Peace Enforcement is to maintain or restore peace and support diplomatic efforts to reach a long-term political settlement.⁵⁴

A recent example of a Peace Operation can be illustrated through the United States involvement in Somalia. The handling of Somalia was executed in three phases: Operation Provide Relief (UNOSOM I), a humanitarian assistance mission; Operation Restore Hope (UNITAF), an operation that combined humanitarian assistance with limited military action; and UNOSOM II, a peace enforcement mission involving active combat and nation building. The United States Army, responding to a presidential directive, participated in Operation Provide Relief in Somalia from 15 August 1992 to 9 December 1992. Organized by CENTCOM, the mission of this operation was to provide military assistance in support of emergency humanitarian relief to Kenya and Somalia.⁵⁵ Despite the reinforcement of UNOSOM I throughout the next several months, the

security situation grew worse. On 4 December 1992 President Bush announced the initiation of Operation Restore Hope. This United Task Force (UNITAF) would bridge the gap until the situation stabilized enough for it to be turned over to a permanent UN peacekeeping force⁵⁶. On 26 March 1993, UNOSOM II, the permanent peacekeeping force was implemented. Its basic mission was to build a secure environment throughout the country. Rather than being in charge, United States participation in this operation was primarily conceived in terms of logistical support. Significantly, however, the United States was also asked to provide a Quick Reaction Force—some 1,150 soldiers from the 10th Mountain Division (Light).⁵⁷

The army force (ARFOR) consisting of the 10th Mountain Division (Light), SOF units from the Special Forces and elements from the 75th Ranger Regiment, had an area of operation that included over 21,000 square miles. As a testimony to these light forces self-reliance, versatility, and flexibility, these units conducted air assault operations, patrols, security operations, cordons and searches, along with other combat operations in support of humanitarian agencies. Additional ARFOR operations included escorting hundreds of convoys, and confiscating thousands of weapons.⁵⁸ The light forces in Somalia successfully accomplished innumerable task, thus demonstrating its strategic utility at the peaceful end of the spectrum.

Because of its strategic mobility, versatility, and flexibility, the light infantry is often called upon first as agents of the United States National Security Strategy. The employment of light infantry across the spectrum of conflict, from Peace Operations/MOOTW, to its integration into the combined arms team during the Gulf War, validates its employment on the modern battlefield and its strategic utility to national policy makers. History illustrates that the light infantry has evolved into a strategic force multiplier for the United States Army. B.H. Liddell Hart once remarked, "that the practical value of history is to throw the film of the past through the projector of the present onto the screen of the future."⁵⁹ His comment is valueless though, unless watched by those that will benefit from the lessons.

IV. THE FUTURE OF LIGHT INFANTRY

*"Darkness is a friend to the skilled infantryman"*⁶⁰

—B.H. Liddel Hart: *Thoughts on War*, 1944

Chris Bellamy in his book, *The Future of Land Warfare*, states that armed conflict will be as prevalent on this planet in the next quarter century as it has been since the dawn of history. Bellamy also points out that there were 654 identified instances of major organized armed conflict in the 265 years between 1720 and 1985, of which 162 started in the years 1951-1985. It is unlikely that the incidence of conflict will diminish, although the balance between different types of conflict has shifted and will continue to do so.⁶¹

Conflict is imminent. Consequently, the United States Army light infantry has to be prepared to greet the adversary that walks through the door of the 21st Century, one that will not only have to deal with the superpowers but third world entities as well. The nuclear, biological, and chemical proliferation threat requires the light infantry to pursue survivability technology and equipment. With the addition of evolved technology and equipment, the 21st Century light infantry warfighter becomes more adaptable to battle space scenarios in urban, jungle and

mountainous areas. Hypothesis and forecasting is one thing, but the armed forces have been given specific guidance. The 1997 United States National Military Strategy directs:

New capabilities described in Joint Vision 2010 are necessarily evolutionary. Through a rigorous process of experimentation, assessment, refinement, and doctrinal development, we can meet our responsibility to maintain ready forces today while taking steps to transform those forces to be superior tomorrow. This transformation of our forces is not a choice between people or technology, but about how to integrate the strengths of both to give the Nation the best possible military capability.⁶²

Technological Advances

In his current form, the light infantryman has a number of weaknesses. First, if located, he can easily be killed by a wide array of weapons. Second, compared to a Desert Storm type of battlefield, where the caliber and lethality of the weapons were significant, his weapons may be less effective. During combat, individual soldiers are easily isolated from one another and their commanders. Perhaps most important, the light infantryman's knowledge of his surroundings is limited by what his eyes can see and his ears can hear. He usually has a pretty chaotic sense of what is going on around him; in fact, no one experiences the fog of war more intensely or personally than he does.⁶³

The traditional solution to this problem has been training. Until the technical revolution of the 1980's educated commanders to start considering the implications of advanced technology on the "grunt," the light

infantryman's fate appeared not to change. Technology opens the door to a radically different future. For example, during the fall of 1995, the Army conducted Warrior Focus to determine the implications of digitization and "Own the Night" technologies for the light infantry force. Warrior Focus was conducted by the Dismounted Battlespace Battle Lab, employing a brigade combat team from the 10th Mountain Division (Light) as well as Army Special Operations Forces (SOF). The experiment included simulations and training at Fort Drum, New York, culminating with Rotation 96-02 at the Army's Joint Readiness Training Center. Key to the experiment was interoperability between dismounted and mounted forces.⁶⁴ This command and control development is an indication that future employment of the light force may be in conjunction with its mechanized brother to tie together two capabilities.

Using the opportunities available at both Fort Drum and the Joint Readiness Training Center, "Own the Night" technology examined operations across a range from low to mid intensity conflict. Additional experimentation with the 101st Airborne Division (Air Assault) proved to enhance the individual soldiers night fighting capability through innovative training techniques in night operations. New equipment was provided primarily to individual soldiers and leaders, including high power night observation sights and target designation capabilities.⁶⁵ Again, though the light forces predominantly fights at night, it is evident that future employment of the

force will maintain night fighting capabilities through new and improved technology.

There are a number of significant observations from Warrior Focus: (1) Digital capabilities lead to more effective battlefield integration of mission planning, preparation and execution, particularly in planning where timeliness and accuracy was improved, (2) greater situational awareness led to significant improvements in mission execution, (3) the combination of digital and "Own the Night" capabilities enhanced unit control and led to more effective target engagement at night, (4) digitization enhanced lethality, particularly through timely deconfliction of fires and enemy locations, and (5) user friendly integration of battle command systems is required.⁶⁶

"Own the Night" technologies can improve the capability of the light fighter in both low and mid-intensity conflicts. With this available technology must also come an advanced soldier. The idea of a superinfantryman is no longer speculation. The United States Army has initiated a program known as the "Soldier as a System" (SAAS), in conjunction with the United States Marine Corps and the United States Special Operations Command. The program, part of a larger effort named Warrior's Edge, is intended to have two parts. The first phase, Block I, or The Enhanced Integrated Soldier's System (TEISS), will be deployed in 1999 and will be followed by a second phase, Block II, which is scheduled for

deployment in 2010. These projects will involve a wide array of new systems, including advanced weapons for individual soldiers, computer networks at the platoon and company level, helmet mounted sensors and displays, exoskeletons, and even chemical compounds to improve the ability of soldiers to learn.⁶⁷

The new approach to the problem of infantry warfare is not confined to laboratories. Thinking about technology and light infantry has risen to the operational level. A report issued by the United States Army Infantry School at Fort Benning, entitled *Infantry 2000*, states:

The future infantryman requires a system that integrates full body ballistic protection along with NBC (Nuclear, Biological, Chemical), flame, laser and microwave protection. Enhanced productivity will be achieved if we can relieve climatic stress on the soldier. Lethality will be increased with integrated full solution individual fire control system. It will use a helmet mounted image display (HELMID) to provide point and shoot accurate fires which will be equally effective day or night or through obscurants and camouflage.⁶⁸

The SAAS program, and the needs described by the Army Infantry School, present a consistent and coherent vision of a revolution in light infantry warfare. Until now, the infantryman has been fairly well limited to combat capabilities provided by biology. He could move, see, and hear, only to the extent that his body permitted him to do so. Now the infantryman will be radically transformed, which will initiate a new era of ground combat.⁶⁹

The true purpose of all of this hi-tech equipment, of course, is to kill the enemy. All of the data in the world, no matter how brilliantly managed

and displayed, will be of no use if the individual infantryman can not act on destroying enemy soldiers. Technology and data management systems must, in the end, converge on the individual soldier's weapon, his means of destruction. Indeed, there has been little or no progress in the weapons of individual soldiers since World War I. They have gotten lighter, less likely to jam, able to fire more rounds, but the machine gun, submachine gun, rifle, hand grenade, and light mortar are all old weapons with fresh veneer. The M-16, Dragon, LAW, and Stinger along with other weapons have not changed their basic design in thirty years.⁷⁰

The Block I plan of TEISS includes an element called the Small Arms Master Plan, which envisions the reduction of the current mix of weapons to three basic types: the sidearm, the individual combat weapon, and the crew-served weapon. The individual combat weapon will be fundamentally different from the rifle—much more powerful, with an explosive charge. Both it and the crew fired weapon are intended to fire more than one type of munition—including grenades and explosive bullets. While certainly increasing the flexibility and lethality of the infantryman, the changes envisioned under the first phase of the system represents less than a quantum leap in the fire power of the infantryman.⁷¹

The future of infantry weapons can already be seen in the manportable antitank weapons currently in use, such as the Javelin, as well

as in the new guided mortars. The Javelin can be fired by a single infantryman who is able to focus on the target, lock the warhead onto the target point, and launch. He can fire and forget, as the Javelin guides itself to the point the infantryman focuses on. Still, other weapons do not even need an initial lock-on. Once fired, the smart munition locates the target itself, or they are guided to the target by a gunner or by another sensor platform, such as a UAV or satellite—there are multiple guidance choices. In each of these cases, both the inefficiency of hand-eye coordination and the tyranny of ballistics have been overcome. The problem remaining is wedding them to the individual infantryman, something that requires little innovation or imagination.⁷²

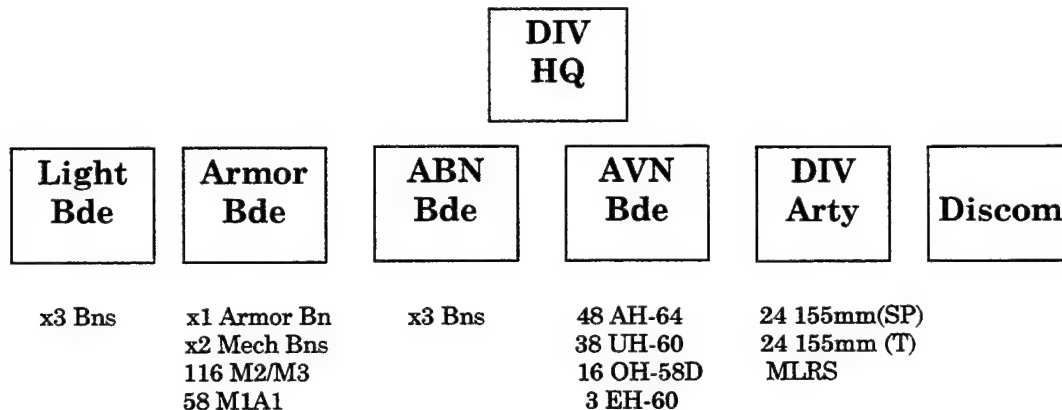
Whichever sort of munition is fired, the infantryman is no longer the weakling of the battlefield. He carries with him the firepower similar to that of armored vehicles and greatly increased range and accuracy. As a result of these developments, infantry warfare will cease to be the statistical game that it has been since the invention of gunpowder. No longer is it a matter of vast numbers of soldiers firing enormous quantities of inaccurate projectiles in the hope that, by saturating a target area, something is hit. The massed infantry armies of the past, necessary to produce the swarms of projectiles required to hit even a single target, will become obsolete.⁷³

Organizational Structure

Employing the right force mix with the assigned mission is paramount in determining success. As the armed forces become smaller it also becomes more difficult to match forces with mission. Thus versatility is important to the contemporary force structure best suited for the military demands of the 21st Century? If the current force structure will not support the demands, consideration must be given to creating divisions capable of performing a myriad of tasks. This section outlines a possible force structure design at the division, more specifically at the infantry within a division for possible 21st Century employment.

The future divisional force structure must be enhanced, flexible, and more capable to face conflicts of tomorrow. As the Army becomes smaller units are going to have to adopt skills that once were provided by other organizations (greater versatility through capability). The proposed future division has a standard light brigade complemented with a mechanized heavy armor brigade. Within the future division there are enough aviation assets to lift a battalion and a half of the light forces for air assault operations and enough attack aviation to provide close air support for ground operations. Moreover, the division artillery has a mix of self propelled and towed artillery to provide timely accurate indirect fires. Although diagram #1 only depicts major firepower, the full complement of logistics, maintenance, and administration capabilities are included. There is another

possibility. A force structure made of different services, for example, where the Marines form the light brigade in the following organization. The day may arrive where service parochialism will have to take a back seat to a viable armed force.



(diagram 1)

Since the focus is on the light infantry of the future, what does an infantry squad within the infantry brigade of diagram 1 contain within its ranks? The following is a depiction of an eleven man infantry squad in the 21st Century.



The squad leader carries a personal weapon and complex computing and communications equipment that enables him to communicate to any command echelon, from the infantryman in the field to the company commander.



The programmer/telecommunication specialists have the primary job to calibrate weapons and personal gear for satellite grids and to reprogram projectiles for new targets and tasks. In combat they serve as the target acquisition team, using multispectral sensing devices to search for enemy air and land threats and targets, transferring data to appropriate weapons systems.



The heavy weapons team supplied with heavy-duty exoskeleton to aid in lifting and follow-on robots to aid in launching, they simultaneously launch twenty heavy projectiles into combat, using the multimission projectile system.



Personal weapons specialists or rifleman are armed with ordinary weapons launchers. They advance ahead of the squad to provide perimeter security for the specialist teams and do the dirty work.⁷⁴

Conceptual Employment

This squad is a depiction of the future. Evolution and technology have increased the firepower capability of the squad today, thus making it more lethal and capable than a platoon from the past. The introduction of anti-tank and manportable anti-aircraft missiles have given even smaller light infantry elements the ability to engage and defeat threats that once were impervious to light forces. Enhancements in capabilities, from firepower to

command and control, allow smaller units within a light infantry organization great versatility on the modern battlefield. A light infantry element can readily be the base upon which a small but versatile and lethal combined arms team can be built, offering great tactical, even operational utility to commanders. The light infantry of tomorrow will clearly continue to serve with sophisticated equipment of this nature. Land warfare therefore is making a quantum shift, not only in technology, but also in the consequences of technology. The light organization will have to continue their advancements at a more rapid pace to ensure relevance and to maintain utility as a critical element of the National Military Strategy. Technology and organization may actually enhance the role of the light infantry force today with greater versatility in missions through increased capabilities. The logic of the first global empire—the logic of mass armies, nation states, total war—makes little sense in a world of precision-guided weapons. Certainly, transitions take generations to work themselves out. But, just as *Cervantes* could see the absurdity of the Knight at the dawn of the first global epoch, so we can see the end of the GI and the birth of the Supertroop—at the beginning of the second epoch.⁷⁵

V. CONCLUSION

For better or worse, America has seized hold of the future of war, and with it—for a time—the future of humanity.⁷⁶

—George & Meredith Friedman, *The Future of War*

Has the United States Army light infantry evolved properly for the 21st Century? Yes, to date. Light infantry remains a viable member of the armed forces. It, like all things, improves with time and technology. Light infantry is more than conventional infantry. Clearly, it provides a CONUS based power projection capability operating along the full spectrum—from war to peace. As General Wickam envisioned, it provides the United States a versatile strategic capability.

Through specific battlefield examples, it becomes obvious that the United States Army light force has the capability to arrive first and to operate autonomously. The light force as a combined arms team member is a combat multiplier of the first order. Additionally, moving from the mid to high intensity battlefield to Military Operations Other Than War (MOOTW), the light force has become a valued asset capable of performing a myriad of task.

Organizational changes coupled with new technology weapons provide the light force with more versatility through enhanced capability. As the United States Army steps through the door of the 21st Century, its light force will be challenged by a proliferating threat. Moreover, light forces will continue to prepare for the traditional military adversary. However, they have the additional task of preparing for third world adversaries which are becoming more prominent on the sliding scale of conflict. Secretary of Defense Cohen's 1997 report to the President and Congress, makes it very clear, "light forces—airborne, air assault, and light infantry divisions—are tailored for forcible entry operations on restricted terrain, like mountains, jungles, and urban areas."⁷⁷ To summarize, the light infantry force provides the United States a strong and unique strategic capability. As an organization arriving first into an area of operation, the light force is a political as well as military obstacle to foes. Strategic utility and the relevance of light infantry will only be maintained through a commitment to pursue organizational and technological enhancements. At a time when structure and budgets are being reduced, and threats originate across the spectrum of capabilities throughout the world, maintenance of a disciplined, versatile, and lethal light infantry offer the United States an effective, flexible capability to meet the variety of threats and challenges presented in the 21st Century.

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